10/540,168

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?

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NEWS
     1
                 Web Page URLs for STN Seminar Schedule - N. America
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      2
                 "Ask CAS" for self-help around the clock
NEWS
         DEC 23
                 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                 USPAT2
NEWS
         JAN 13
                 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS
         JAN 13
                 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                 INPADOC
NEWS
         JAN 17
                 Pre-1988 INPI data added to MARPAT
NEWS
         JAN 17
                 IPC 8 in the WPI family of databases including WPIFV
NEWS
         JAN 30
                 Saved answer limit increased
NEWS
         FEB 21
                 STN AnaVist, Version 1.1, lets you share your STN AnaVist
                 visualization results
NEWS 10
         FEB 22
                 The IPC thesaurus added to additional patent databases on STN
NEWS 11
         FEB 22
                 Updates in EPFULL; IPC 8 enhancements added
NEWS 12
         FEB 27
                 New STN AnaVist pricing effective March 1, 2006
NEWS 13
         FEB 28
                MEDLINE/LMEDLINE reload improves functionality
NEWS 14
         FEB 28
                TOXCENTER reloaded with enhancements
NEWS 15
         FEB 28
                REGISTRY/ZREGISTRY enhanced with more experimental spectral
                 property data
NEWS 16
        MAR 01
                 INSPEC reloaded and enhanced
         MAR 03
                Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 17
NEWS 18
         MAR 08
                X.25 communication option no longer available after June 2006
NEWS 19
        MAR 22
                EMBASE is now updated on a daily basis
NEWS 20
        APR 03
                 New IPC 8 fields and IPC thesaurus added to PATDPAFULL
        APR 03
NEWS 21
                 Bibliographic data updates resume; new IPC 8 fields and IPC
                 thesaurus added in PCTFULL
                 STN AnaVist $500 visualization usage credit offered
NEWS 22 APR 04
NEWS 23
        APR 12
                LINSPEC, learning database for INSPEC, reloaded and enhanced
NEWS 24
        APR 12
                 Improved structure highlighting in FQHIT and QHIT display
                 in MARPAT
NEWS 25
        APR 12
                 Derwent World Patents Index to be reloaded and enhanced during
                 second quarter; strategies may be affected
```

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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FILE 'HOME' ENTERED AT 16:44:06 ON 04 MAY 2006

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=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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 $^{^{\}star}$ The CA roles and document type information have been removed from *

^{*} the IDE default display format and the ED field has been added,

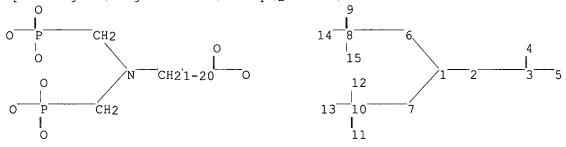
Structure search iteration limits have been increased. See HELP SLIMITS for details.

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http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10540168.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

 $1-2 \quad 1-6 \quad 1-7 \quad 2-3 \quad 3-4 \quad 3-5 \quad 6-8 \quad 7-10 \quad 8-9 \quad 8-14 \quad 8-15 \quad 10-11 \quad 10-12 \quad 10-13$

exact/norm bonds :

3-4 3-5 8-9 8-14 8-15 10-11 10-12 10-13

exact bonds :

1-2 1-6 1-7 2-3 6-8 7-10

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

$$\begin{array}{c|c}
O & P & CH_2 \\
O & N & CH_2 \\
O & P & CH_2
\end{array}$$

$$\begin{array}{c}
O & CH_2 \\
O & P & CH_2
\end{array}$$

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:44:53 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 29 TO ITERATE

100.0% PROCESSED 29 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 257 TO 903 PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 16:45:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 646 TO ITERATE

100.0% PROCESSED 646 ITERATIONS 86 ANSWERS

SEARCH TIME: 00.00.01

L3 86 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 166.94 167.15

FILE 'CAPLUS' ENTERED AT 16:45:07 ON 04 MAY 2006
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=> s 13

L4 308 L3

=> s 14 and nanoparticle

35087 NANOPARTICLE 58177 NANOPARTICLES

61266 NANOPARTICLE

(NANOPARTICLE OR NANOPARTICLES)

L5 4 L4 AND NANOPARTICLE

=> d l4 ibib abs hitstr tot

THE ESTIMATED COST FOR THIS REQUEST IS 1573.88 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) / N:n REQUEST CANCELED

=> d 15 ibib abs hitstr tot

ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

2004:930970 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:376821

TITLE: Core/shell nanoparticles suitable for (f)

ret-assays

INVENTOR(S): Meyer, Christiane; Haase, Markus; Hoheisel, Werner;

Bohmann, Kerstin

PATENT ASSIGNEE(S): Nanosolutions GmbH, Germany; Bayer Technology Services

GmbH

SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE				APPL	ICAT	ION I	DATE				
EP	1473	347			A1		2004	1103		EP 2	003-	9704			2	0030	430
	R:	ΑT,	BE,	CH,	DE,	DK,	ĒS,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
AU	2004	2345	35		A1		2004	1111		AU 2	004-	2345	35		2	0040	429
CA	2523	027			AA		2004	1111		CA 2	004-	2523	027		2	0040	429
WO	2004	0969	44		A1		2004	1111		WO 2	004-	EP45	74		2	0040	429
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:						MW,										
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
PRIORIT	Y APP	LN.	INFO	. :						EP 2	003-	9704			A 2	0030	430
									,	WO 2	004-1	EP45	74	Ţ	W 2	0040	429

AB The present invention relates to luminescent inorg. nanoparticles comprising (a) a core made from a first metal salt or oxide being surrounded by (b) a shell made from a second metal salt or oxide being luminescent and having non-semiconductor properties. These particles can be advantageously used in (fluorescence) resonance energy transfer ((F)RET)-based bioassays in view of their higher (F)RET efficiency.

55628-97-2 524934-34-7 TΤ

RL: ARU (Analytical role, unclassified); ANST (Analytical study) (Core/shell nanoparticles suitable for FRET-assays)

55628-97-2 CAPLUS RN

CN Hexanoic acid, 6-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

```
CH2-PO3H2
H_2O_3P-CH_2-N-(CH_2)_5-CO_2H
```

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

CH2-PO3H2 $H_2O_3P - CH_2 - N - (CH_2)_{10} - CO_2H$

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:525918 CAPLUS

DOCUMENT NUMBER:

141:94785

TITLE:

Production and use of nanoparticles with

in-situ-modified surface using multifunctional

modifiers

INVENTOR(S):

Koehler, Burkard; Bohmann, Kerstin; Hoheisel, Werner;

Haase, Markus; Haubold, Stefan; Meyer, Christiane;

Heidelberg, Thorsten

PATENT ASSIGNEE(S): SOURCE:

Bayer Ag, Germany Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: DAMENIO NO

	PATENT NO.					KIND DATE			•	APPLICATION NO.									
	DE 10259935 WO 2004058914									DE 20	002-	1025		20021220 20031206					
						AM,													
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
			NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			•	•	•	MD,	•	•	•	•	•	,	•	•	•	•	•	•	
			•			GB,			•		•	•	•		•		•	•	
						CF,													ΤG
	AU	2003	2922	01		A1		2004	0722		AU 20	003-:	2922	01		20	0031:	206	
	EΡ	15788	888			Α1		2005	0928		EP 20	003-	7677	59		21	0031:	206	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
1	US	20060	0631	55		A1		2006	0323	1	JS 20	005-	5401	68		2	0050	329	
PRIORITY APPLN. INFO.:					.:		•			DE 2002-10259935				A 20021220					
										1	WO 20	003-	EP13	316	1	W 20	0031	206	

OTHER SOURCE(S): MARPAT 141:94785

The present invention concerns procedures for the synthesis of nanoparticles, especially metal salt nanoparticles, and in particular the chemical modification their surfaces to attach functional groups providing properties required for future use. According to the invention the addition of a modifying agent to the synthesis mixture leads to attachment of a 1st functional group to the nanoparticle surface which is then bonded to specifically selected mols. carrying a 2nd functional group. Thus a post synthetic, sep. use-specific modification step is unnecessary. Advantageously addition of a 3rd functional group is possible. A new substance class, the imino-bis(methylenephosphono)carboxy lic acid pentaalkyl esters, are particularly suitable as modifying agents. These modifying agents permit the growth of the nanoparticles with controlled and simultaneous modification of the surface during synthesis (in situ) in such a way that the particles are very soluble in a multiplicity of solvents, and can be used for coupling of mols. with functional groups, e.g., antibodies; the particles possess an all around usefulness.

TΤ 55628-97-2P 524934-34-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(modifier preparation intermediate; production and use of **nanoparticles** with in-situ-modified surface using multifunctional modifiers)

RN 55628-97-2 CAPLUS

CN

Hexanoic acid, 6-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

$$_{\rm H_{2}O_{3}P-CH_{2}-N-(CH_{2})_{5}-CO_{2}H}^{\rm CH_{2}-PO_{3}H_{2}}$$

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

IT 711029-60-6P 711029-61-7P 714231-05-7P

RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (surface modifier; production and use of nanoparticles with

in-situ-modified surface using multifunctional modifiers)

RN 711029-60-6 CAPLUS

$$\begin{array}{c|c} & \text{OEt} \\ & | \\ \text{CH}_2 - \text{P-OEt} \\ & | \\ \text{OEt} & | & \text{O} \\ & | & \text{O} \\ | & | & \text{O} \\ \text{EtO-P-CH}_2 - \text{N-} (\text{CH}_2)_{10} - \text{C-OEt} \\ | & | & \text{O} \\ \end{array}$$

RN 711029-61-7 CAPLUS

RN 714231-05-7 CAPLUS

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:376763 CAPLUS

DOCUMENT NUMBER:

138:381687

TITLE:

Resonance energy transfer assays based on luminescent

inorganic doped nanoparticles

INVENTOR(S):

Bohmann, Kerstin; Hoheisel, Werner; Koehler, Burkhard;

Dorn, Ingmar

PATENT ASSIGNEE(S):

Bayer Aktiengesellschaft, Germany

PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
					A2 20030515 A3 20031023				WO 2002-EP12256						20021104			
	W:	CO,	CR,	CU,	CZ,	DE,	AU, DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		LS,	LT,	LU,	LV,	MA,	IN, MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
	DW.	UA,	UG,	US,	UZ,	VC,	SE, VN, MZ,	YU,	ZA,	ZM,	ZW	-	·	·			·	
	IXW.	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
DE	1015	CG,	CI,	CM,	GA,	GN,	GQ, 2003	GW,	ML,	MR,	NE,	SN,	TD,	TG				
CA	2465 1444	646			AA		2003	0515		CA 2	002-	2465	646		21		104	
		AT,	BE,	CH,	DE,	DK,	ES, RO,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	2005 2005									US 2	004-	4943	90		2	0040	430	
PRIORITY	Y APP	LN.	INFO	. :						DE 2						0011		

The invention relates to an assay based on resonance energy transfer (RET), comprising a 1st mol. group A, which is marked with ≥1 energy donor, and ≥1 2nd mol. group B which is marked with ≥1 energy acceptor, the donor comprising a mol. or particle which can be energetically excited by an external radiation source and which is fluorescence enabled and the acceptor comprising a mol. or particle which can be excited by energy transfer via the donor with partial or complete quenching of the donor fluorescence, and the donor and/or acceptor comprise luminescing inorg. doped nanoparticles having an expansion of ≤ 50 nm, emitting electromagnetic radiation with stokes or anti-stokes scattering after energetic excitation. Thus LaPO4:Ce.Tb nanoparticles were synthesized; the nanoparticles were treated with ethylene glycol and sulfuric acid at 210 °C in inert gas atmospheric for 3 h. The particles were dissolved

at ca. $135^{\circ}C$; ethylene glycol was partially evaporated and the solution was dialyzed over night against water. The surface treated nanoparticles underwent oxidation with potassium permanganate in the presence of sulfuric acid for carboxy functionalization.

IT 524934-34-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (resonance energy transfer assays based on luminescent inorg. doped
 nanoparticles)

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

CH2-PO3H2 | H2O3P-CH2-N-(CH2)10-CO2H

IT 524934-34-7DP, conjugate with bromotrimethyl silane-treated LaPO4:Ce, Tb nanoparticles, and binding to biotin, oligonucleotide or antibody

RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(spacer; resonance energy transfer assays based on luminescent inorg. doped nanoparticles)

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

$$^{\text{CH}_2-\text{PO}_3\text{H}_2}_{|}$$
 $^{\text{H}_2\text{O}_3\text{P}-\text{CH}_2-\text{N}-\text{(CH}_2)}_{10}-\text{CO}_2\text{H}}$

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:335397 CAPLUS

DOCUMENT NUMBER: 135:200299

TITLE: Nonpolymeric Coatings of Iron Oxide Colloids for

Biological Use as Magnetic Resonance Imaging Contrast

Agents

AUTHOR(S): Portet, David; Denizot, Benoit; Rump, Elmar; Lejeune,

Jean-Jacques; Jallet, Pierre

CORPORATE SOURCE: UPRES-EA 2169 "Vectorisation Particulaire", Faculty of

Medicine, Pavillon Ollivier, University of Angers,

Angers, F 49045, Fr.

SOURCE: Journal of Colloid and Interface Science (2001),

238(1), 37-42

CODEN: JCISA5; ISSN: 0021-9797

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB Iron oxide nanoparticles are used in vivo as contrast agents in magnetic resonance imaging. Their widely used polymer coatings are directly involved in their biocompatibility and avoid magnetic aggregation. As these polymer brushes also limit their tissue diffusion due to important hydrodynamic sizes, this work looks to obtain particles coated with thin layers of organic biocompatible mols. Coating mols. were chosen depending on their fixation site on iron cores; carboxylates, sulfonates, phosphates, and phosphonates, and, among them, analogs of the phosphorylcholine. Two coating procedures (dialysis and exchange resins purification) were evaluated for hydrodynamic size, total iron concentration, electrophoretic mobility, and colloidal stability. Furthermore, a complementary test on stainless steel plates evaluated the contamination by competition of phosphonates as a rough estimation of the biocompatibility of

the particles. Coating with bisphosphonates, the more interesting fixation moiety, leads to small (less than 15 nm) and stable objects in a wide range of pH including the neutrality. From stability data, the coating d. was evaluated at around 1.6 mols. per nm2. Including a quaternary ammonium salt to the coating mol. lowers their electrophoretic mobility. Moreover, this type of coating protects steel plates against contamination without significant desorption. All these properties allow further developments of these nanoparticles for biomedical applications. (c) 2001 Academic Press.

IT 2439-99-8, N, N-Bis (phosphonomethyl) glycine

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(nonpolymeric coatings for iron oxide colloids used as MRI contrast agents)

RN 2439-99-8 CAPLUS

CN Glycine, N, N-bis(phosphonomethyl) - (7CI, 8CI, 9CI) (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s nanoparticle and (caproate or undecanoate)

35087 NANOPARTICLE

58177 NANOPARTICLES

61266 NANOPARTICLE

(NANOPARTICLE OR NANOPARTICLES)

3485 CAPROATE

135 CAPROATES

3572 CAPROATE

(CAPROATE OR CAPROATES)

979 UNDECANOATE

30 UNDECANOATES

1001 UNDECANOATE

(UNDECANOATE OR UNDECANOATES)

L6 10 NANOPARTICLE AND (CAPROATE OR UNDECANOATE)

=> s 16 not 15

L7 10 L6 NOT L5

=> d 17 ibib abs hitstr tot

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:737508 CAPLUS

TITLE:

Electrochemical and bioelectrochemical reactions gated

by hydrophobic magnetic nanoparticles

AUTHOR(S):

Katz, Eugenii

CORPORATE SOURCE:

Institute of Chemistry, The Hebrew University of

Jerusalem, Jerusalem, 91904, Israel

SOURCE:

Abstracts of Papers, 230th ACS National Meeting, Washington, DC, United States, Aug. 28-Sept. 1, 2005

(2005), COLL-032. American Chemical Society:

Washington, D. C. CODEN: 69HFCL

DOCUMENT TYPE:

Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

AB Magnetic nanoparticles consisting of undecanoate

-capped magnetite were used to control and switch the hydrophobic or hydrophilic properties of the electrode surface. The magnetic attraction

of the functionalized nanoparticles to the electrode surface by means of an external magnet yields a hydrophobic interface that acts as insulating layer prohibiting interfacial electron transfer. The retraction of the magnetic nanoparticles from the electrode to the upper toluene phase by means of the external magnet generates a hydrophilic electrode that reveals effective interfacial electron transfer. This was used to switch reversibly bioelectrocatalytic reactions. The hydrophobic magnetic nanoparticles were also used to control biorecognition and biocatalytic processes on biomaterial-functionalized interfaces, such as DNA hybridization, polymerization

and scission.

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:588711 CAPLUS

DOCUMENT NUMBER: 143:103260

TITLE: Nanoparticle compositions of counter-ion complexes of drugs for oral administration

INVENTOR(S): Pai, Chaul-Min; Min, Mi-Hong; Hwang, Jun-Seok; Cho,

Kyung-Mi

PATENT ASSIGNEE(S): Samyang Corporation, S. Korea

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND						D	DATE		APPLICATION NO.						DATE		
WO 2005061004					 A1	_	 2005	0707	WO 2004-KR3448						20041224		
	W:			AL,						_						CA,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NΑ,	NI,	NO,
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UŻ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											

PRIORITY APPLN. INFO.:

KR 2003-96641 A 20031224

AB The present invention relates to an orally administrable composition containing nanoparticles with the particle size of 500 nm or less, comprising 0.130 weight% of a complex of a water-soluble drug and a counter-ion substance in which the charged water-soluble drug is bonded with the counter-ion substance, 0.5-80 weight% of a lipid, 0.5-80 weight% of a polymer, and 1-80 weight%

of an emulsifier, wherein the weight ratio of said lipid and said polymer is in the range of 1:0.053, and a preparation method thereof. The composition of the

present invention has high gastrointestinal absorption rate upon oral administration, and has high drug entrapping rate in the nanoparticle, and is also stable against lipases. For example, oral nanoparticles contained insulin-sodium docusate complex 15, monoolein 60, chitosan 20, Poloxamer 407 200 mg, and small amount of citric acid.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:472002 CAPLUS

DOCUMENT NUMBER: 143:13359

TITLE: Nanoparticle compositions comprising

antibodies for targeted delivery Liversidge, Elaine; Cunningham, James

Elan Pharma International Ltd., Ire.

PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

INVENTOR(S):

SOURCE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

KIND DATE APPLICATION NO. DATE PATENT NO. WO 2005049091 A2 20055 A2 20050602 WO 2004-US37246 20041109 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20050707 US 2004-979792 US 2005147664 A1 20041103

US 2005147664 A1 20050707 US 2004-979792 20041103
PRIORITY APPLN. INFO.: US 2003-519251P P 20031113

The present invention is directed to compns. of one or more nanoparticulate active agents, at least one PEG-derivatized surface stabilizer, and at least one antibody or fragment thereof, and methods of using such compns. for targeting delivery of the one or more active agents to a desired site. The one or more active agents preferably have a particle size of $\leq 2~\mu$. The targeted delivery can be used, e.g., for disease diagnosis, imaging, or drug delivery. Thud, WIN-68209 particles wee stabilized by PEG-DSPE stabilizer.

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:168785 CAPLUS

DOCUMENT NUMBER: 142:388499

TITLE: Magnetoswitchable electrochemistry gated by

alkyl-chain-functionalized magnetic

nanoparticles: Control of diffusional and surface-confined electrochemical processes Katz, Eugenii; Baron, Ronan; Willner, Itamar Institute of Chemistry, The Hebrew University of

Jerusalem, Jerusalem, 91940, Israel

SOURCE: Journal of the American Chemical Society (2005),

127(11), 4060-4070

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AUTHOR(S):

CORPORATE SOURCE:

AB Magnetic nanoparticles consisting of undecanoate

-capped magnetite (average diameter .apprx.5 nm) are used to selectively gate diffusional and surface-confined electrochem. reactions. A two-phase system consisting of an aqueous buffer solution and a toluene phase that includes

the suspended undecanoate-capped magnetic nanoparticles is used to control the interfacial properties of the electrode surface. Two different phenomena are controlled by attraction of the magnetic nanoparticles to the electrode by means of an external magnet: (i) The attracted magnetic nanoparticles form a hydrophobic layer on the electrode surface resulting in the blocking of diffusional electrochem. processes, while retaining the redox functions of surface-confined electrochem. units. (ii) For certain surface-immobilized redox species (e.g., quinones), the attraction of the magnetic

nanoparticles to the electrode surface alters the mechanism of the process from an aqueous-type electrochem. to a dry organic-phase-type electrochem. Also, bioelectrocatalytic and electrocatalytic transformations at the electrode are controlled by means of attraction of the magnetic nanoparticles to the electrode surface. Controlling the catalytic functions of the modified electrode by means of the magnetic nanoparticles attracted to the electrode is exemplified in two different directions: (i) Blocking of the bioelectrocatalyzed oxidation of glucose by glucose oxidase (GOx) using a surface-confined ferrocene monolayer as electron-transfer mediator. (ii) Activation of the microperoxidase-11 electrocatalyzed reduction of cumene hydroperoxide. In the latter system, the hydrophobic magnetic nanoparticles adsorb toluene, and the hydrophobic matrix acts as a carrier for cumene hydroperoxide to the electrode surface modified with the microperoxidase-11 catalyst.

REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:15791 CAPLUS

DOCUMENT NUMBER: 142:120462

TITLE: Therapeutic and diagnostic conjugates for use with

multispecific antibodies

INVENTOR(S): Mcbride, William J.; Goldenberg, David M.; Noren,

Carl; Hansen, Hans J.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 53 pp., Cont.-in-part of U.S.

Ser. No. 150,654.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE		APPLICATION NO.					DATE				
US	2005 2002 6 6962	0063			A1 A1 B2		2005 2002 2005	0117	US 2004-776470 US 2001-823746						20040211 20010403			
US	2003 2005	1985			A1 20031023 A2 20050825			US 2002-150654 WO 2005-US4177					20020517 20050211					
	W:	AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY, ES,	CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE, KZ, FR,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR, BF,	AZ, DK, IL, MA, PT, UA, MZ, TJ, HU,	BA, DM, IN, MD, RO, UG, NA, TM, IE,	BB, DZ, IS, MG, RU, US, SD, AT, IS,	BG, EC, JP, MK, SC, UZ, SL, BE, IT,	BR, EE, KE, MN, SD, VC, SZ, BG, LT,	BW, EG, KG, MW, SE, VN, TZ, CH, LU,	BY, ES, KP, MX, SG, YU, UG, CY, MC,	BZ, FI, KR, MZ, SK, ZA, ZM, CZ, NL,	CA, GB, KZ, NA, SL, ZM, ZW, DE, PL,	CH, GD, LC, NI, SY, ZW AM, DK, PT,	
PRIORIT		MR, LN.	ΝE,	SN,	TD,	TG				US 1 US 1 US 1 US 1 US 2 US 2	998- 998- 999- 999- 001- 002-	9014: 1041: 3377: 3821: 8237:	2P 56P 56 86 46	1 2 1 2 2	P 1: P 1: A2 1: B2 1: A2 2: A2 2:	9980 9981 9990 9990	622 014 622 823 403 517	
OTHER S	SOURCE	(S):			MAR	PAT	142:	1204	52									

OTHER SOURCE(S): MARPAT 142:120462

AB Disclosed are compds. that include two or more haptens conjugated by a spacer or a carrier. The haptens may include diethylenetriaminepentaacetate (DTPA), histamine-succinyl-glutamine (HSG), or combinations of DTPA and HSG. The compds. also includes an effector mol. which may be conjugated to one or more of the haptens, the

spacer/carrier, or both. The effector mol. may be conjugated by a number of linkages including an ester linkage, an imino linkage, an amino linkage, a sulfide linkage, a thiosemicarbazone linkage, a semicarbazone linkage, an oxime linkage, an ether linkage, or combinations of these linkages. Also disclosed are methods of synthesizing the compds. and/or precursors of the compds.

ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

2004:934160 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:388650

Anti-CD74 immunoconjugates and their therapeutic and TITLE:

diagnostic uses

Griffiths, Gary L.; Hansen, Hans J.; Goldenberg, David INVENTOR(S):

M.; Lundberg, Bo B.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 377,122.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PA'	TENT NO.		KIND	DATE	APPLICATION NO.	DATE			
US US US US AU CA WO	200421920 6306393 200207180 200312405 200313393 200411519 200424727 2529496 200411039	7 8 0 3 0	A1 B1 A1 A1 A1 A1 AA AA	20041104 20011023 20020613 20030703 20030717 20040617 20041223 20041223 20041223 20050428	US 2003-706852 US 1999-307816 US 2001-965796 US 2002-314330 US 2003-350096 US 2003-377122 AU 2004-247270 CA 2004-2529496 WO 2004-US19238	20031112 19990510 20011001 20021209 20030124 20030303 20040617 20040617			
	W: AE, CN, GE, LK, NO, TJ, RW: BW, AZ, EE, SI,	AG, AL, CO, CR, GH, GM, LR, LS, OM, TM, TN, GH, GM, BY, KG, ES, FI,	AM, AT CU, CZ HR, HU LT, LU PG, PH TR, TT KE, LS KZ, MD FR, GB	, AU, AZ, , DE, DK, , ID, IL, , LV, MA, , PL, PT, , TZ, UA, , MW, MZ, , RU, TJ, , GR, HU,	BA, BB, BG, BR, BW, II DM, DZ, EC, EE, EG, II IN, IS, JP, KE, KG, II MD, MG, MK, MN, MW, II RO, RU, SC, SD, SE, S UG, US, UZ, VC, VN, II NA, SD, SL, SZ, TZ, II TM, AT, BE, BG, CH, II IE, IT, LU, MC, NL, II CI, CM, GA, GN, GQ, II EP 2004-776666	ES, FI, GB, GD, KP, KR, KZ, LC, MX, MZ, NA, NI, SG, SK, SL, SY, YU, ZA, ZM, ZW JG, ZM, ZW, AM, CY, CZ, DE, DK, PL, PT, RO, SE, GW, ML, MR, NE,			
	R: AT, IE,	SI, FI,	DE, DK RO, CY	, ES, FR, , TR, BG,	GB, GR, IT, LI, LU, 1 CZ, EE, HU, PL, SK	NL, SE, MC, PT,			
US	200519130 200605134 Y APPLN. I	9	A1 A1	20050901	US 2005-104594 US 2005-222838 US 1999-307816 US 2000-590284 US 2001-965796 US 2002-360259P US 2002-314330 US 2003-350096 US 2003-377122 US 2003-478830P US 1997-41506P US 1998-38995 US 1999-138284P US 2003-706852 WO 2004-US19238	20050413 20050912 A1 19990510 A1 20000609 A1 20011001 P 20020301 A2 20021209 A2 20030124 A2 20030303 P 20030617 P 19970324 A2 19980312 P 19990609 A 20031112 W 20040617			
AB Di	sclosed ar	e compn	s. that	include a	anti-CD74 immunoconjud				

therapeutic and/or diagnostic agent. Also disclosed are methods for preparing the immunoconjugates and using the immunoconjugates in diagnostic and therapeutic procedures. The compns. may be part of a kit for administering the anti-CD74 immunoconjugates compns. in therapeutic and/or diagnostic methods. Anti-CD74 binding mols. are conjugated to the one or more lipids by one or more of a sulfide linkage, a hydrazone linkage, a hydrazine linkage, an ester linkage, an amido linkage, an amino linkage, an imino linkage, a thiosemicarbazone linkage, a semicarbazone linkage, an oxime linkage, a carbon-carbon linkage. Anti-CD74 immunoconjugates comprise a drug, a prodrug, a toxin, an enzyme, a radioisotope, an immunomodulator, a cytokine, a hormone, an antibody., an oligonucleotide, or a photodynamic agent.

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:790239 CAPLUS

DOCUMENT NUMBER: 141:402333

TITLE: Magnetoswitchable Controlled

Hydrophilicity/Hydrophobicity of Electrode Surfaces Using Alkyl-Chain-Functionalized Magnetic Particles:

Application for Switchable Electrochemistry Katz, Eugenii; Sheeney-Haj-Ichia, Laila; Basnar,

katz, Eugenii; Sneeney-нај-Ichia, Laila; Bashar

Bernhard; Felner, Israel; Willner, Itamar

CORPORATE SOURCE: Institute of Chemistry and Racah Institute of Physics,

The Hebrew University of Jerusalem, Jerusalem, 91940,

Israel

SOURCE: Langmuir (2004), 20(22), 9714-9719

CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AUTHOR(S):

AB Magnetic nanoparticles consisting of undecanoate

-capped magnetite (average diameter .apprx.4.5 nm; saturated magnetization, Ms, 38.5

emu q-1) are used to control and switch the hydrophobic or hydrophilic properties of the electrode surface. A 2-phase system consisting of an aqueous buffer solution and a toluene phase that includes the suspended capped magnetic nanoparticles is used to control the interfacial properties of the electrode surface. The magnetic attraction of the functionalized particles to the electrode by an external magnet yields a hydrophobic interface that acts as an insulating layer, prohibiting interfacial electron transfer. The retraction of the magnetic particles from the electrode to the upper toluene phase by the external magnet generates a hydrophilic electrode that reveals effective interfacial electron transfer. The electron-transfer resistance and double-layer capacitance of the electrode surface upon the attraction and retraction of the functionalized magnetic particles to and from the electrode, resp., by the external magnet were probed by Faradaic impedance spectroscopy (Ret = 170 Ω and Cdl = 40 μF cm-2 in the hydrophilic state of the electrode and Ret = 22 k Ω and Cdl = 0.5 μF cm-2 in the hydrophobic state of the interface). The magnetoswitchable control of the interface enables magnetic switching of the bioelectrocatalytic oxidation of glucose in the presence of glucose oxidase and ferrocene dicarboxylic acid to ON and OFF states.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:691043 CAPLUS

DOCUMENT NUMBER: 142:411718

TITLE: Nonionic nanoparticles from miniemulsion

polymerization of vinyl acetate with e-caprolactone or Miglyol as hydrophobes -

Application in encapsulation agents

AUTHOR(S): Rajot, Isabelle; Bone, Stephane; Bathfield, Mael;

Graillat, Christian; Hamaide, Thierry; Iojoiu,

Cristina; Racles, Carmenus

CORPORATE SOURCE: Laboratoire de Chimie et Procedes de Polymerisation,

CNRS-CPE Villeurbanne, Villeurbanne, 69616, Fr.

SOURCE: Buletinul Stiintific al Universitatii "Politehnica"

din Timisoara Romania, Seria Chimie si Mediului

(2003), 48(1-2), 131-134

CODEN: BSIMFG; ISSN: 1224-6018

PUBLISHER: Universitatii "Politehnica" din Timisoara

DOCUMENT TYPE: Journal LANGUAGE: French

AB Polymerization of vinyl acetate in a miniemulsion containing active components

in the

presence of hydrophobic compds. can give directly encapsulant nanoparticles containing active components alone or as solution in the hydrophobic compds. Biocompatible hydrophobic compds. are oils such as

Miglyol or benzyl benzoate, or caprolactone macromer prepared by the

coordinated anionic polymerization in the presence of a suitable transfer agent can solubilize hydrophobic active components. The mol. weight of polyvinyl acetate can be controlled by the use of transfer agent. The encapsulation

is useful for active components such as indomethacine or Vitamin E.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:597624 CAPLUS

DOCUMENT NUMBER: 139:323086

TITLE: Surface-functionalized nano-beads as novel supports

for organic synthesis

AUTHOR(S): Cammidge, Andrew N.; Downing, Stuart; Ngaini, Zainab CORPORATE SOURCE: School of Chemical Sciences and Pharmacy, Wolfson

Materials and Catalysis Centre, University of East

Anglia, Norwich, NR4 7TJ, UK

SOURCE: Tetrahedron Letters (2003), 44(35), 6633-6634

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:323086

AB A novel polymer support has been prepared in which functional link points are located on the surface of polymer nano-beads; the use of the support

has been demonstrated in the syntheses of unsym. porphyrins.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:770219 CAPLUS

DOCUMENT NUMBER: 134:48502

TITLE: Photoelectrochemistry with Integrated

Photosensitizer-Electron Acceptor and Au-

Nanoparticle Arrays

AUTHOR(S): Lahav, Michal; Heleg-Shabtai, Vered; Wasserman,

Julian; Katz, Eugenii; Willner, Itamar; Duerr, Heinz;

Hu, Yi-Zhen; Bossmann, Stefan H.

CORPORATE SOURCE: Institute of Chemistry and The Farkas Center for

Light-Induced Processes, The Hebrew University of

Jerusalem, Jerusalem, 91904, Israel

SOURCE: Journal of the American Chemical Society (2000),

122(46), 11480-11487

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Photosensitizer/electron acceptor mol. cross-linked Au-

nanoparticle arrays are assembled on indium-doped tin oxide (ITO)

electrodes by a layer-by-layer deposition process. A Ru(II)-tris-(2,2'-

Zn(II)-protoporphyrin IX-bis(N-methyl-N'-undecanoate -4,4'-bipyridinium) (2) are used as mol. cross-linkers for the generation of Au-nanoparticle (13 \pm 1 nm) arrays of a controlled number of layers. The Au-nanoparticle arrays are characterized by absorbance spectroscopy and by electrochem. means. The electrodes functionalized with 1- or 2-cross-linked Au-nanoparticle arrays are used in photoelectrochem. expts. The resulting action spectra of the photocurrents follow the absorbance spectra of the resp. chromophores. Mechanistic studies indicate that the photocurrents originate from intramol. electron-transfer quenching of the photoexcited state of the photosensitizer by the electron acceptor units, leading to the formation of intermediate redox species. The oxidized photoproduct oxidizes the sacrificial electron donor, Na2EDTA, whereas the reduced bipyridinium radical cations transfer the electrons to the bulk electrode support. REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	62.08	229.23
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.50	-10.50

bipyridine)-cyclobis(paraquat-p-phenylene) catenane (1) or

STN INTERNATIONAL LOGOFF AT 16:53:30 ON 04 MAY 2006